Niagara in Summer and Winter

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COMPILED AND PUBLISHED

BY

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OTHING that the western hemisphere can present in the way of a natural wonder, sublime and surpassing in its beauty, equals this gem in the diadem of nature, Niagara Falls.

No visitor, from Father Hennepin, the first white man who gazed upon the tumult and thunder of its waters, down to the present who, from bridge or bank or brink of precipice, has looked out over the ghost-like mists, the sparkling rainbows, the sloping splendor of greenish water as it rushes over the precipice, or the stupendous wonder of the Whirlpool Rapids, but has sung its praises and told the story of its awesomeness and magnificence. The greatest masters of the English tongue have sung its praises, have painted word-pictures that will live while the cataract itself lasts.

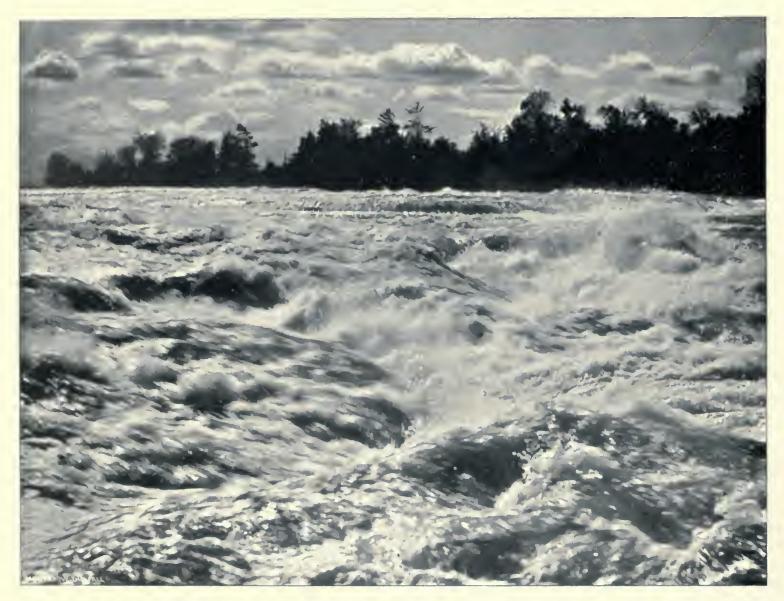
In this work there are presented, by the witchery of the art preservative, views of Niagara in Summer and Winter which depict its beauties more accurately than all the descriptions of the Falls that were ever written.





GENERAL VIEW OF THE FALLS

In this view there is presented in panoramic form the magnificent ensemble of the Falls. In the centre of the vast Horseshoe, lying between the American and Canadian Falls, and rising against the sky, with its masses of greenery, lies Goat Island. In the foreground is the "Maid of the Mist" and its landing-place, and nearby the inclined plane which carries visitors from the brink of the Falls to the edge of the river below. Over these Falls, rushing at the rate of 275,000 cubic feet a second, is the drainage of the Great Lakes. The Falls are receding gradually; the present height of the Falls is 161 feet. Every year sees a small portion worn away by the action of the water. The city of Niagara Falls lies on the American side. Across the Suspension Bridge and a short distance below the Falls on the Canadian side is the village of Clifton.



RAPIDS ABOVE THE FALLS

The tail of the Niagara River from the head of the Rapids, three-quarters of a mile above the Cataract, to the edge of the precipice is nearly 60 feet, the velocity of the current varying from 7 to 27 miles an hour. No words can describe the grandeur of this sight as the visitor, standing upon the brink of the current above the Falls, looks out across a tossing, foaming stretch of water, a very emblem of chaos itself. All the shades of green and violet are displayed in the colorings of this water, while spread over it, like a network of filmy lace that rises and falls with the tumultuous heaving of the water's bosom, is the white of foam and spray and mist.



AMERICAN FALL FROM GOAT ISLAND

Standing on the edge of Goat Island where its brink projects over the yawning gulf of mist and waters below, the best view of the American Fall is obtainable. Goat Island was originally known as Iris Island, from the number of magnificent rainbows that play about it when the slanting sunlight falls upon the clouds of spray that rise like smoke above it. Here one can stand and almost touch the greedy, greenish waters as they plunge in their mad career into the fathomless depths below. The romance of this island was revealed some years ago when names with dates as far back as 1771 were found carved in the rocks and almost ob iterated by time.



AMERICAN FALL FROM CANADA

Still another view of the American Fall, which presents it in another light and coloring, is obtained from the Canada shore. Here the angle of the view presents the Fall as an unbroken line, straight as a die, while instead they are curved, as we have seen, into a crescent shape that is rapidly assuming the lines of an angle. Over the foam-painted waters in the foreground, where they sweep in sullen majesty toward the Whirlpool Rapids, is seen the little steamer "Mand of the Mist"



BRINK OF THE AMERICAN FALL

The most terrifying sight in the whole panorama of splendor presented by Niagara Falls is to stand on the American side at the brink of the American Fall. The majesty and overwhelming grandeur of the sight can never be forgotten by those who have witnessed it. The line of the precipice over which the waters sweep is jagged and irregular, and causes the spray to dash out in great spurts as though some titanic hand were tossing the water from hidden depths. Here and there, where the rocks come near the surface, their ebony outlines can be discerned beneath the crystal whiteness of the flood.



CANADA FALL AND "MAID OF THE MIST"

The Canada Fa'l extends from the Canada shore to Goat Island, the width being estimated in round numbers at 2500 feet. The perpendicular height of this Fail is 158 feet, or three feet less than the American Fall, a discrepancy that is caused by the slope of the land. It has been roughly estimated that 1,350,000 cubic feet of water pass over these falls every minute. Near the centre of the Fall there is presented a rare picture of Nature's beauty, in the share of a gigantic plume of spray that dashes into the air for a hundred feet. It is caused by a portion of the Fall striking an immense mass of rock which in some former age was broken from the centre of the precipice.



HORSESHOE FALL

This is a closer view of the Canadian or Horseshoe Fall. While it is called Horseshoe, the curve has little resemblance to a horseshoe; it has more the shape of an inverted letter "A." A magnificent rainbow is almost constantly playing across the face of the Fall, occasionally widening so that the whole sweep of its prismatic beauty covers the Fall like a protecting arch of glory. Looking upward at the massive, frowning cliff with the spray wetting our faces, the roar of the cataract is so great that it prevents communication save by signal and pantomine. The estimated depth of the water where it plunges over the precipice of the Horseshoe Fall is 20 feet.



THE THREE SISTER ISLANDS

The Three Sister Islands are connected to Goat Island by bridges. They have witnessed many awesome sights since Niagara Falls first became known to the world. They are three beautiful little islands lying like emeralds on white velvet just above the Falls. Twenty-seven years ago William McCollough fell into the rapids near the second Sister Island. When about a quarter of the way down to the spot where he was to be hurled to death over the brink the current lodged him against a low ledge of rock, from which he was rescued by Conroy, a guide, who managed to reach the victim with a line.



BRIDGE TO GOAT ISLAND

The bridge to Goat Island is one of the sights of Niagara. It is a beautiful structure, and takes the place of several previous crude wooden affairs that served as passageways in the past three-quarters of a century. The first bridge was erected in 1817. It was carried away by the ice the following spring. Other bridges were erected in 1818, in 1839, in 1849, and in 1856. The piers were formed first by building a massive abutment of timber on the water's edge, from which were projected enormously long and heavy beams of timber. These were secured by great piles of stone, and their outer ends rendered steady by stilts thrust into the bottom of the river. A platform was then built, loaded with stone and sunk, and on this a pier was built.



LUNA ISLAND BRIDGE

Another beautiful architectural structure is the bridge to Luna Island, which is adjacent to Goat Island. It was while climbing over the rocks directly under this island that the only accident that ever occurred at Niagara by the falling of rock happened. Dr. Hungerford, of Troy, New York, was instantly killed by a mass of rock falling upon him, sixty years ago. From this island a superb view of the river below the Falls, the inclined railway, and in the distance the Surpension Bridges, with their cables like the meshes of a spider's web, is to be obtained.



ON THE BRINK OF THE CANADA FALL

Here, better than anywhere else, can be seen the angular shape of the Canadian Fall. The process of erosion is clearly visible in the angle near the left of the Fall, where the mighty onrush of the current has eaten away, bit by bit, the flint-like substance of the precipice. It is in this angle that the water, falling with its accumulated force upon a mass of rock half-way down the precipice, dashes itself back again as if in baffled rage at the obstacle. We are now viewing the Canadian Fall from the Canadian side. It is historic ground. A mile farther west, up the Niagara River, but within sound of the mighty roar of the Cataract, was fought, eighty-eight years ago, on the 25th day of July, 1814, the battle of Lundy's Lane, between the British and American forces.



PROSPECT POINT

No view of the American Fall Is so terrifying as that obtained by standing on Prospect Point, a jutting rock which is perched on the very brink of the American Fall. Not five feet away is the brink of the Fall, over which the waters pour in resistless might. The whole sweep of the cataract's brink is visible from this point. There has never been an accident here, though more than one mortal, tired of life or fascinated by the sight, has sought death by leaping into the flood. A stout iron railing encircles Prospect Point, which is a part of Prospect Park, a beautiful spot containing about ten acres.



TERRAPIN ROCK AND HORSESHOE FALL FROM GOAT ISLAND

Standing on the extremity of Goat Island, there is presented an unsurpassed and strikingly artistic view of the famous Terrapin Rock and the Horseshoe Fall. The tiny bridge which spans the Rapids just above the Fall has one end resting on Goat Island and the other upon Terrapin Rock. A stone tower formerly stood on Terrapin Rock, which lies on the very brink of the Falls, seemingly as if in momentary danger of being swept into the vortex below. The ceaseless thunder of the waters, the vibration of their volume, and the constant dampness and mist rendered the tower dangerously unsafe, and it was removed about a quarter of a century ago.



ROCK OF AGES

The poetic fancy which saw in the glgantic mass of rock in the foreground a symbol of the "Rock of Ages," was not far astray, because nowhere else possibly in all the world can there be found a counterpart of this singular monument. Centuries ago, possibly cycles, in the dim distance of creation, it was hurled from commanding prominence to its present resting-place. Here, as the centuries have waxed and waned, it has stood immovable in the presence of the mighty flood, unshaken by its thundering, eternally bathed in the spray of the torrent, always and ever bathed in the white foam that enwraps it like a girdle of samite. Beyond this monument of the wrath of Nature is seen in the dim background the bridges that lead to that other wonder of Nature, the Cave of the Winds.



AMERICAN FALL FROM BELOW

No painter that ever lived, no poet that ever sang, no orator that ever charmed listening thousands with a matchless eloquence of description, can do adequate justice to the picture presented above. There is combined in it all of majesty, beauty, immeasurable power. Here in the shining whiteness of its mighty volume, Niagara builds her diaphanous rainbows, thunders out on the mightiest organ pipes that Nature has ever known the hymn of all the ages, a psalm of life and glory and stupendous majesty. In this view, more than any other, is presented some faint conception of what the splendor of the infinite may be.



GORGE OF THE NIAGARA RIVER

Seven miles of the wildest beauty encompasses the river after it plunges from brink to bottom of the precipite. The Gorge of Niagara River extends from the Falls to Queenstown, seven miles below. In the course of its tortuous and tumultuous winding it has an additional fall of 100 teet. The Gorge itself, worn through countless zens of time as the cataract slowly retreated, is for the most part a perpendicular mass of rock. The chasm is winding, and at one point makes an abrupt turn to the right, and in this angle is found the famous Whirlpool. The Gorge is a perfect mine to the cologist, for here ready to hand is outlined on the eternal page of Nature the formation of the rock, a study of which tells the story of the Falls.



PROSPECT POINT-MOONLIGHT

If Niagara Falls in mid-day is of surpassing beauty, the picture at night is supernal in its weird and fascinating splendor. In the foreground, thrown into deepest shadow by the glory of a harvest moon, are the rocks, black as midnight in their contour. Beyond them like ghosts are the mists of the Fall that rise in spectacular shapes and hover above the agitated water like silver motes in the moonbeams. The green and violet and white of the waters by day are turned into bronze and silver by night. Restless, trieless, the mighty currents sweep on past ebon rock and sullen shore, moving ever onward under the placid beams of midnight moon or mid-day sun toward the ocean that will ultimately wind them in its clasp.



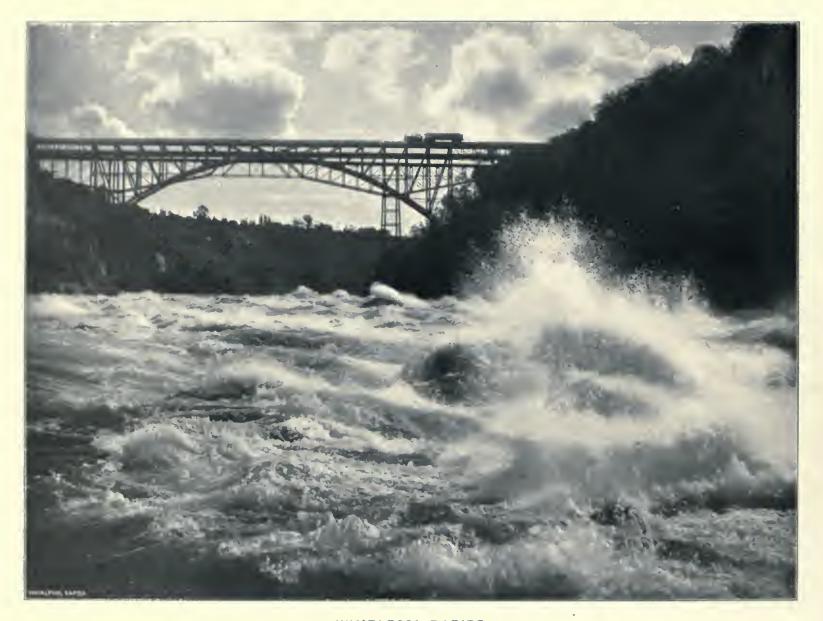
THE GREAT GORGE ROUTE

The fancy of the artist and impressionist gives strange, yet often appropriate, names to picturesque points or localities. The Great Gorge Route possesses many points of interest, but none more striking than "Sentinel Rock," a vast mass of stone left standing when the roadway for the electric line was blasted. Solitary and alone it seems to stand like a sentinel, guarding by day and by night the waters beneath.



TIGHT-ROPE RIVER ON A CROSSING THE NIAGARA DIXON

Niagara has always held a fascination for those adventurous spirits who seek lasting or temporary fame from some unprecedented act of daring. The first to challenge the perils of Niagara Gorge was the famous tight-tope walker, Blondin. He first crossed the Gorge below the Falls on a rope stretched from cliff to cliff, in 1859. His rope was twelve hundred feet long. A year later he performed the same feat just below the railway Suspension Bridge. He crossed and recrossed, performing many daring feats. Since that time many others have succeeded in crossing the Gorge on a rope. In 1876 Maria Spelterina not only equalled Blondin, but crossed on a rope wearing stilts. Dixon was the latest daring aerialist to perform the feat represented above.



WHIRLPOOL RAPIDS

Two miles below the Falls are the Whirlpool Rapids. At this point the river is not more than one hundred yards wide, and through this narrow defile the united waters of Lakes Superior, Michigan, St. Clair, Huron and Erie go thundering by at an estimated speed of twenty-seven miles an hour. The roar Is deatening. The force of the water is like the rage of some imprisoned litan, who, struggling beneath the flood, tosses the water in snowy spray and angry billows from twenty to thirty feet above the head of the spectator standing securely upon the shore. Sir Charles Lyell estimated that fifteen hundred million cubic feet of water rushed through the Whirlpool Rapids every minute. The depth of the water here is problematic. It is supposed to be about three hundred feet.



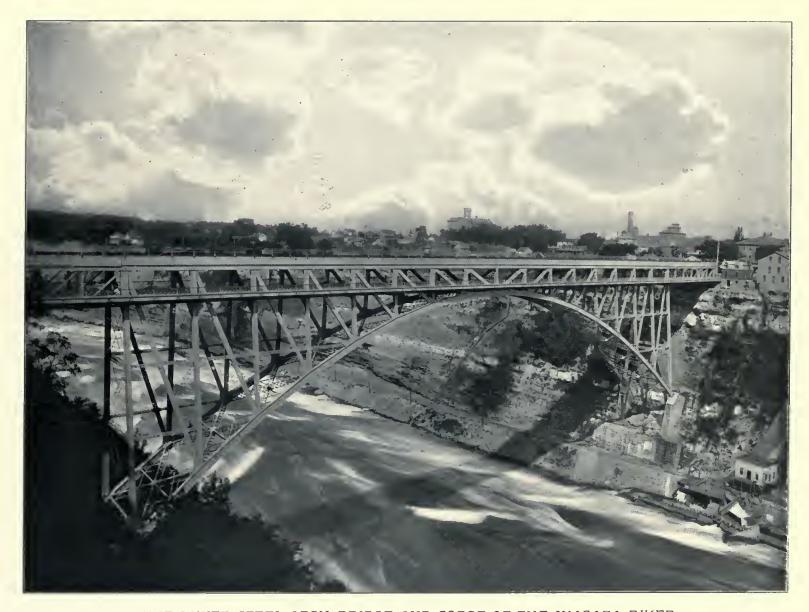
THE WHIRLPOOL

The Whirlpool is a mile below the Rapids. The popular conception of it is that of a maelstrom, a vortex of water swirling in gradually narrowing circles to a depressed centre. Instead the force of the water pouring into this basin raises it in the middle to a distance of three feet above the outer surface. The Whirlpool is the natural result of the inighty body of water rushing into a confined space and seeking an outlet. Bodies, driftwood, everything, in fact, that goes over the Falls, must eventually find its way to the Whirlpool, where, after circling for days, perhaps, it is either thrown out upon the bank or is carried by the outlet on down to where the River empties into Lake Ontario.



TABLE ROCK AND THE DEVIL'S PULPIT

On the American side, near the Devil's Hole and overlooking the gorge of the Niagara River, is the glgantic natural formation known as Table Rock. It is chiefly interesting from the fact that here, in the year 1765, a great fight took place between the French and Indians on one side and the British on the other, in which the latter were defeated by superior numbers, after fighting manfully to the last. Many were driven over the cliff into the depths below and the others were killed by the infuriated red men. Of the entire detachment only two escaped to tell the tale.



THE LOWER STEEL ARCH BRIDGE AND GORGE OF THE NIAGARA RIVER

This view of the same bridge is taken from below. It seems almost incredible that the slender arch stretching from shore to shore could uphold the weight above it and the train which is seen approaching on the left. And yet closer inspection will reveal that this slender arch is a massive steel affair the strength of which for sustaining great loads is almost inconceivable.



THE LOWER STEEL ARCH BRIDGE

There was a time, not many years ago, when only one suspension bridge spanned the river below the Falls. All this is changed now. Magnificent structures of steel, erected upon strictest scientific principles as to tension, resisting power, and other technicalities, carry huge trains, with thousands of passengers, annually in safety above the stream. The Lower Steel Arch Bridge is a sample of these wonderful works of man.



UPPER STEEL ARCH BRIDGE AND MILLING DISTRICT

Herewith is presented a view of another bridge, the Upper Steel Arch Bridge, with the milling district in the distance. In this case the supporting arch is of double construction. It is a magnificent piece of engineering work, and is used for trolley traffic, passengers, and carriages. This bridge replaced the old Suspension Bridge, which was torn from its fastenings in the hurricane of January 10, 1889. On the floor of this bridge there is not only a carriage way, but double tracks for trolley cars, and wide walks for pedestrians.



INCLINED RAILWAY AMERICAN FALL LUNA ISLAND CAVE OF THE WINDS



GOAT ISLAND

HORSESHOE FALLS

TABLE ROCK
VICTORIA PARK

NIAGARA FALLS



THE CANTILEVER BRIDGE

The Cantilever Bridge was the second bridge of its kind to be erected in the United States. It was seven months and a half in building and was completed December 1, 1883. Its total length is 910 feet, and it is supported on steel towers which rise 130 feet from the piers on either side. The bridge is owned and operated by the Michigan Central Railroad.



UPPER STEEL ARCH BRIDGE

Here is presented another view of the Upper Steel Arch Bridge which has been described in another place. It is one of the finest bridges of its kind in the world, and is the highway annually for hundreds of thousands of people who cross it to reach the Canadian side and under another flag to view the wonders of Niagara from another vantage ground.



THE BROCK MONUMENT

This graceful shaft marks the site of the battle of Queenstown Heights, October 13, 1812, where an American force of 2500 Militia and a regiment of Regulars attacked the British, under the command of General Isaac Brock. The Americans were defeated and their Commander, Coi. Winfield Scott, was captured, and every commissioned officer was either killed or wounded. On the British side, General Brock lost his lite and many an English soldler found his last resting-place near the historic banks of the Niagara River.



VIEW NORTH FROM THE OBSERVATION TOWER

One more view before we descend from the summit of the tower, and this time our faces turn northward. Stretching along the river and on the summit of the bluff are to be seen a few of the wonderful manufacturing establishments of which we have just spoken. These industries draw their power from the source of Nature itself, the rushing waters of the river above the Falls.



THE MILLING DISTRICT

in this view is presented a few of the waterfalls not made by Nature, but created by the hand of man. Any one of these ribbon-like streaks of foam on the face of the rocky cliff anywhere else in the country would attract attention. They are dwarfed now by the majesty of the greater Falls. These streams are the result of draining the waters of Niagara River into gigantic sluice-ways and tunnels which drive immense masses of machinery to generate electricity and supply heat and power to the industries upon the upper crest of the Gorge.



THE DEVIL'S HOLE

About three miles from the Falls, on the American Side, there is a chasm 200 feet wide, extending back at right angles about 600 feet from the edge of the River. In this ravine is located the "Devil's Hole." A stream finds its way to the river by this gulch, which bears the forbidding title of Bloody Run. It acquired its name from the fact that on the 14th of September, 1763, during the French and Indian War, a wagon-train of British was ambushed near this spot. But one man of the ninety-six in the party escaped, the rest being slaughtered by the Seneca Indians. The little stream ran blood-red that day, and hence its title.





THE WHITE MAN'S FANCY

THE RED MAN'S FACT

It would be strange indeed if legend and mystery were not entwined with the circling mists that hover over the Falls. The above pictures are emblematic of the tancy of white man, legend of Indian. In the fancy of the Caucasian the siren of the spray is a beautiful maiden beckoning forever and forever to her victims to leap into the fatal embrace of the Cataract. The Indian legend is that in olden time the fairest maiden of the tribe was sacrificed here to the Spirit of the Waters. The only daughter of a chief was chosen for the sacrifice. He bowed to the mandate, the voice of the tribe, but on the fatal day, when the white canoe of the maiden shot out into the Rapids, another white canoe containing her father followed swiftly after, and together they entered the hunting grounds of the hereafter through the green gateway of the swirling waters.



RUSTIC BRIDGE TO WILLOW ISLAND

A glimpse of rustic life in which the hand of man is plainly visible in contact with the hand of Nature is presented in this bridge to Willow Island. It spans a placid breadth of the mighty river, and yet even beneath these quiet, smiling waters, death lurks in the current. So it is all around here; beneath the quietest surface there is moving always and ever a current to which if one yields himself will carry him to certain death.



CANADA FALL IN WINTER

Niagara Falls in winter is as great an attraction as Niagara Falls in summer or in any period of the year when the Ice King does not reign supreme. In winter there are but three dominant colors in all the landscape: the white of the snow and ice, the green of the thunderous waters, the brown of rock and precipice. Niagara River above the Falls never freezes. The current is too swift, the rush of waters too irresistible, the hand even of the Ice King is too slack to held this current in its grasp. In the above picture there is presented a view of the Canada Fall in winter.



AMERICAN FALL FROM CANADA

The American Fall from the Canada side presents unique features. At the base of the Fall are piled up vast masses of ice and snow which take the snape of turrets and castles, of domes, spires, and minarets. The formations are caused by the constant falling and freezing of the mists that never for one instant of time are absent from the Falls. It is the eternal accompaniment of the waters quite as much as their thunder. The foreground of this picture shows the River below the Falls filled with floating ice.



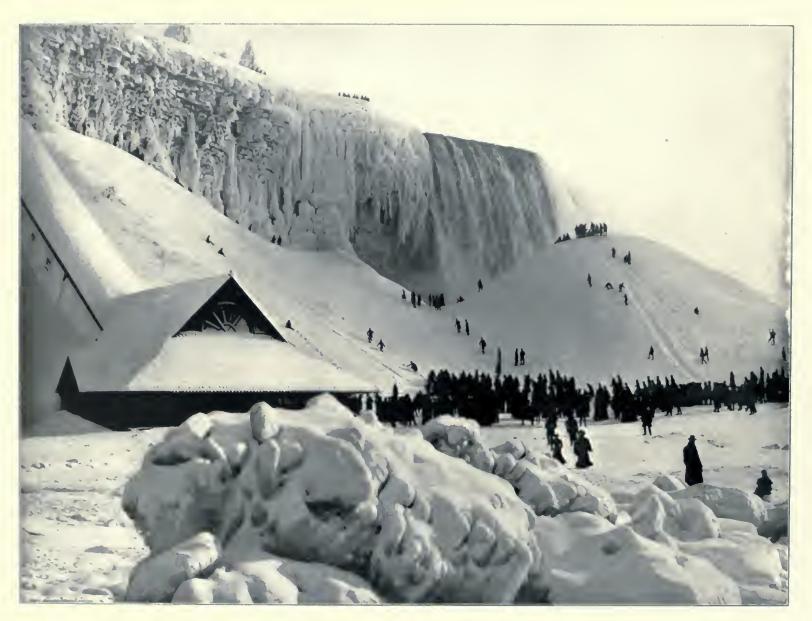
THE ICE PYRAMID

Another curious ice-formation is the Pyramid, observable in the centre of the picture. Behind it is the American Fall, while to the left of the Fall is a succession of magnificent stalagmites and stalactites formed by the action of frost and water.



THE ICE BRIDGE

A unique feature of Niagara is the so-called Ice Bridge It extends out upon the frozen river, and the winding pathway that marks the journeying of the tourist is dotted here and there with little huts which serve as novelty bazaars and places of shelter. To the right of the picture are seen more of the curious snow formations that help to make Niagara a beauty spot, even though there is no brightness of flower, no softening shades of green, to relieve the monotony of white expanse on land and water.



THE INCLINE AND ICE BRIDGE

This is a closer view of the famous Pyramid to the left of the Incline. A magnificent view of the American Fall is obtained from its top. Some idea of the crowds that gather at Niagara even in mid-winter can be gleaned from an observation of the multitude that has surrounded the wild formation.



AMERICAN FALL FROM GOAT ISLAND-WINTER

Vieing with the beauty of the ice figures moulded from spray and snow by the fingers of the Frost King is the delicate tracery of the foliage on the islands and along the banks of the wonderful river. Nature seems to have excelled herself in the attempt to weave the weird and picturesque out of the materials at her command. In the above view of the American Fall from Goat Island in mid-winter one of the beauties of the picture is the lace-like tracery of the frost-laden trees against the ebony blackness of the waters.



ICE-FORMATION, PROSPECT PARK

Here again, in greater measure, is exhibited the almost unearthly beauty of ice-formation. The winter around Niagara is usually severe, frequently accompanied by heavy snowfall. The face of Nature is changed. There are but the staring outlines of white and black, or dark green, the white of ice and snow, the black of winter woodland, yet out of these Nature manages to manufacture, as seen above, some of the most beautiful of her creations.



THE ICE PALACE

An Ice Palace built of solid blocks of crystal surmounted by turrets and minarets, the counterpart of mediæval fortresses, is presented in the above. These Ice Palace formations are built of blocks of ice cemented together by frost, and are always and ever a source of greatest curiosity to the tourist.



BRIDGE TO SECOND SISTER ISLAND-WINTER

The beautiful decorative powers of the mid-winter elements are here displayed in all their beauty on the bridge leading to the Second Sister Island. The outlines of the structure are preserved, covered with the immaculate purity of snow and ice. It is the weird beauty of winter that attracts thousands of tourists annually to this wonderland of nature, of which this bridge faithfully reproduced in photographic art is a sample.



PROSPECT POINT IN WINTER

Here again we stand upon the brink of the American Fall in winter at Prospect Park. The Falls take on a new beauty; it is unique because nothing like this is known in all the range of cataract and fall and torrent anywhere in the known world. Other great cataracts like that of Caroni River, in South America, or the Falls of the Zambesi, in distant Africa, are located in trapic climes beyond the clutch of the Ice King's eager fingers. Others, such perhaps as the great Falls of Labrador, may present sights as unusual as Niagara in winter, but less than a dozen pairs of Caucasian eyes have looked upon the tremendous volume of these rolling waters imprisoned in the heart of the distant North.



TERRAPIN ROCK IN WINTER

Let the reader of these lines, if he can, conjure up in imagination anything more weirdly beautiful than this view of Terrapin Rock in winter. The distant Falls are swathed in mist. The faraway Canadian biuffs are masses of silvery whiteness. The nearer foreground is a tangled mass of snow and ice and denuded foliage. Yet beneath this iron clasp of winter the torrent of Niagara rolls on unchecked, knowing no master, stayed by no barrier.



AMERICAN FALL FROM CAVE OF THE WINDS-WINTER

In this view of the American Fall from the Cave of the Winds Nature appears to have exhausted herself in the rich carving of unchecked fancy. Everything from a massive dome to the slenderest needle-like etching of a stalactite is presented. There are Alpine slopes, Alaskan glaciers, and Siberian wastes of desolation presented in this and the succeeding pictures. If the visitor to Niagara desires to have all the sublimity in his nature aroused by the weird and the wonderful, he need only stand in the Cave of the Winds and view the beauties that Nature has flung about him with lavish hand.



CANADA FALL IN WINTER

And now across the Ice Bridge the tourist takes his way to the Canadian side. Standing in the shelter of the overhanging precipice decorated with icicle and organ-pipe in clearest crystal, he looks across at the majestic plunge of the Canadian Fall as it rushes over the ice-bordered brink into the unknown depths beneath. It is a repetition of the story in black and white; the culmination of artistic beauty; the work of a world builder.



AMERICAN FALL FROM GOAT ISLAND-WINTER

In the foreground and in the upper distance is presented all that there is of life and motion in this picture of what may be termed the lee King's wrath. The tumbling torrent races past; the dashing spray turns to ice on either side; even the brink of the precipice is a jagged mass of crystal. It was in the torrent in the foreground that the mysterious Francis Abbott, the Hermit of the Falls, lost his life. He lived for two years on one of the islands in Niagara River above the Falls. No one knew whence he came. The waters fascinated him, and in the end, one bright day in June, sixty-one years ago, they lured him to his dath. A week afterward the torn and mangled body of the hermit was found at the mouth of the river and buried within sound of the Falls that he loved so well.



ICE-FORMATION

The ice-formation presented in the above is reproduced here because of its unusual character. It is rare, even in the history of Niagara, that such a formation can be found. In the above the visitor in imagination can wander through the aisles and transepts of a great cathedral whose music is the anthem of the waters and whose organ peal the unending thunder of the cataract.



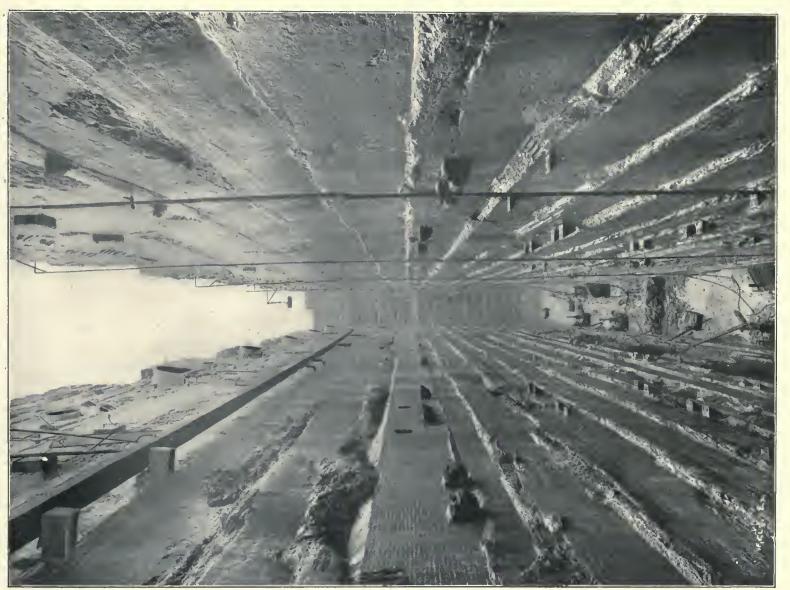
UPPER STEEL ARCH BRIDGE-WINTER

No fitter subject to close this series of winter pictures of the world's most wonderful waterfall could be chosen than this wild riot of ice-flow below the Upper Steel Arch Bridge. Here, piled in reckless confusion, are millions of tons of ice. Heaped in every shape the giant floes are piled as if flung aside by the resistless power of a Hercules. Ice enough to supply all the cities of New York State is shown in this unusual view. It is a picture that can be witnessed almost any winter in the magnificent gorge through which the waters of the Great Lakes flow.



THE POWER-HOUSE

It was not until within the past twenty years that any sustained practical attempt was made to utilize the stupendous power of Niagara, although long before the Civil War such a scheme had been planned. Now the city of Niagara Falls is a hive of industry. The waters have been chained and led by devious subterranean passages to where great wa er-wheels are turned, which impart to a hundred industries the motive power to their myriad machines. The view above is but one of many to be witnessed in the milling district of Niagara Falls. Millions of dollars in capital and millions of horse-power are represented in the intricate machinery housed within the red walls of the mills and factories and power-houses.



THE WHEEL-PIT

This is a pit in which are planted the wheels which impart the initial motive-power to the mills and factories and industries mentioned before. It is one of the most remarkable engineering works extant. It connects with a race-way or tunnel that is a wonder in itself. In this work 600,000 tons of material were excavated; 10,000,000 feet of lumber were used, besides 16,000,000 bricks, 60,000 cubic yards of stone, and 55,000 barrels of "Giant" American Portland cement. The tunnel is 7000 feet in length, with a slope of 6 feet in every 1000.



SUSPENSION BRIDGE FROM QUEENSTOWN TO LEWISTON

The Suspension Bridge over the Niagara River, above Lewiston, is 1050 feet long, and stretches 60 feet above the surface of the water. It was opened to the public in July, 1899. It is the only suspension bridge crossing the river, the others being constructed on the arch or cantilever principle. The bridge practically connects Lewiston on the American side and Queenstown, named after Queen Charlotte on the Canadian side. The first Suspension Bridge at this point was erected in 1850, and was wrecked by a hurricane in 1865.

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